

REMARKS

Claims 1, 2, 4, 5, 7-13, 15, 16, 18-23, 25, 26, 28-34, 36, 37, 39-81 and 83 are pending, of which claims 12, 13, 15, 16, 18-23, 25, 26, 28-34, 36, 37 and 39-81 are withdrawn. This leaves claims 1, 2, 4, 5, 7-11 and 83 under examination, with claim 1 being independent. Claim 1 has been amended to recite that the crystalline semiconductor film is annealed to repair lattice defects caused by the introduction of the dopant impurity, as set forth in the application at, for example, page 8, lines 15-17, and claim 83 has been added. Claim 83 finds support in the application at, for example, page 16, lines 13-23. No new matter has been introduced.

Claims 1, 2, 4, 5 and 7-11 have been rejected as being anticipated by Oka (U.S. Patent No. 6,235,563). Applicant requests reconsideration and withdrawal of this rejection because, as noted in the previous response, introducing a dopant impurity into a crystalline semiconductor film through an insulating film by ion doping *such that a peak of a concentration profile of the dopant impurity is located in the insulating film*, as recited in claim 1, would not be inherent in Oka.

As previously noted, the “fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency [thereof] ... the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” MPEP 2112, emphasis in original.

Here, the only “basis in fact and/or technical reasoning” applied is the Examiner’s assertion that “Applicant’s specification teaches that” forming a silicon oxide layer over a crystalline substrate prior to and during ion implantation results in the claim limitation of “a peak of a concentration profile of said dopant impurity is located in said insulating film,” as recited in claim 1. As previously noted, applicant’s disclosure actually shows that a concentration profile of a dopant in an underlying semiconductor film may be controlled by controlling a thickness of an overlying insulating film (as recited in new claim 83).

Therefore, as previously noted, the mere fact of forming a silicon oxide (insulating) layer over a semiconductor film prior to ion implantation, which, at best, is what is shown by Oka, is not sufficient to establish the inherency of the recited peak of the concentration profile being located in the insulating film. Accordingly, applicant respectfully submits that Oka does not disclose or properly suggest all of the limitations of claim 1, and that, accordingly, the rejection should be withdrawn.

In response to these arguments, the final rejection notes that the arguments are "not persuasive because Applicant's claim should point out the novel step such as the combination of forming an oxide to a specific thickness and accelerating the dopants such that the method produces novel results. However, Applicant's claim limitations do not recite such limitations and the method steps are identical to that of Oka, therefore the results may be inferred."

Applicant strongly disagrees, as claim 1 does recite such a limitation in reciting that "a peak of a concentration profile of said dopant impurity is located in said insulating film," which requires the steps of the claim to be performed such that this result occurs. By contrast, Ota nowhere indicates that this result would or should occur and, accordingly, does not anticipate the subject matter of claim 1.

New claim 83 depends from claim 1 and recites controlling a thickness of the insulating film so that the peak of the concentration profile of the dopant impurity is located in the insulating film. Claim 83 is believed to be allowable by virtue of its dependence from claim 1 and because it recites controlling the thickness of the insulating film in a manner that is not described or suggested by Oka.

Applicant submits that all claims are in condition for allowance.

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Page : 18 of 18

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Enclosed is a \$790.00 check for the Request for Continued Examination (RCE) filing fee.
Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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